## CLAIMS

**1.** A software object for use in a media processing filter graph, the interface comprising:

an input, coupled to a media source, to receive content from the media source; and

a dynamically determined plurality of outputs, each responsive to the input and coupled to a source processing chain, to provide each of the source processing chains with media content requested from a single instance of the media source in accordance with a user defined media processing project.

**2.** A software object according to claim 1, wherein the software object alleviates each source processing chain from opening an independent instance of the source.

**3.** A software object according to claim 1, wherein the number of outputs are dynamically determined by the number of independent processing chains required to process media content from the media source.

**4.** A software object according to claim 1, wherein the source processing chains are comprised of filter graph filters which uniquely transform the media content in some way.

**5.** A software object according to claim 1, wherein the object receives requests for media content from one or more of the source processing chains and satisfies said requests.

**6.** A software object according to claim 5, wherein the object issues seek commands to the media source to satisfy the request(s) for media content.

**7.** A software object according to claim 5, wherein the object serializes simultaneous requests for media from the source received from multiple source chains.

**8.** A software object according to claim 7, wherein the interface prioritizes the serialized requests based, at least in part, on a relative project time of each of the requested clips.

**9.** A software object according to claim 6, wherein the object receives request for media content from a user through a higher-level application, and issues a seek command to satisfy the request.

**10.** A software object according to claim 1, wherein multiple objects are invoked and coupled to an associated multiple instances of source filters to satisfy multiple simultaneous requests for content from the sources.

**11.** A software object according to claim 1, wherein the object is exposed by an operating system executing on a computing system implementing a media processing system.

**12.** A software object according to claim 1, wherein the object is an instance of a segment filter exposed to a media processing system executing on a computer system through a render engine.

**13.** A storage medium comprising a plurality of executable instructions which, when executed, implement a software interface according to claim 1.

**14.** A computing system comprising:

a storage medium having stored therein a plurality of executable instructions; and

an execution unit, coupled to the storage medium, to execute at least a subset of the plurality of executable instructions to implement an interface according to claim 1.

**15.** A method of generating a filter graph for a user-defined processing project, the method comprising:

analyzing the project for multiple accesses to a single source of media content;

determining that the multiple accesses cannot be combined and/or share a common processing chain; and

coupling a single instance of the media source to the one or more processing chains through a software object to satisfy the multiple accesses without invoking a commensurate number of multiple instances of the media source.

**16.** A method according to claim 15, further comprising:

receiving a request for content at the software object; and

issuing a seek command from the software object to the media source to retrieve the media for presentation to a requesting processing chain.

**17.** A method according to claim 15, wherein the method is implemented by a render engine, exposed from an operating system to a media processing system executing on a computing system.

**18.** A method according to claim 17, wherein the software object is a segment filter.

**19.** A method according to claim 15, further comprising:

identifying multiple simultaneous access to the media source; and

invoking a commensurate number of software objects, coupling a commensurate number of instances of the media source to processing chains to satisfy the multiple simultaneous requests.

**20.** A storage medium comprising a plurality of executable instructions including at least a subset of which that, when executed, implement a method according to claim 15.

**21.** A computing system comprising:

a storage medium having stored thereon a plurality of executable instructions; and

an execution unit, coupled to the storage medium, to execute at least a subset of the plurality of executable instructions to implement a method according to claim 15.

**22.** A media processing system comprising:

a source; and

a software object, coupling the source to one or more of a plurality of processing chains, to satisfy multiple, non-combinable requests to the source for media content.

**23.** A media processing system according to claim 22, wherein the software object is a segment filter.

**24.** A media processing system according to claim 22, wherein the software object is exposed from an operating system executing on a computing system implementing the media processing system.

**25.** A media processing system according to claim 22, wherein non-combinable requests for media include one or more of requests where a source time of the requested content do not align, requests where project time of the requests do not align, and/or requests where the requested content is to be processed differently, thus requiring a separate processing chain.

**26.** A media processing system according to claim 25, wherein the software object is implemented within a filter graph representation of a user-defined media processing project, to reduce invoked instances of the media source required to satisfy said non-combinable requests.

**27.** A media processing system according to claim 22, wherein the software object receives independent requests for content from one or more media processing chains.

**28.** A media processing system according to claim 27, wherein the software object generates and issues seek command(s) to satisfy said requests.

**29.** A media processing system according to claim 22, wherein the media processing system selectively invokes multiple instances of the software object to satisfy multiple simultaneous requests for content, wherein each instance of the software object requires an associated instance of the media source and a processing chain.

**30.** A media processing system according to claim 22, wherein the software object serializes multiple simultaneous requests for media content received from multiple processing chains.

**31.** A media processing system according to claim 22, wherein the software object is a segment filter in a filter graph of filters dynamically generated to process media in accordance with a user-defined processing project.